

What is claimed is:

1. A gas sensor comprising:
a housing;
5 a sensor element disposed within said housing;
a cover having a first and a second end, said cover extending
at the first end from an end portion of said housing;
at least four lead wires extending from outside to inside said
cover to establish electrical connections with said sensor element;
10 an elastic member retained within the second end of said
cover, said elastic member having formed therein at least four holes
through which said lead wires pass, one of the holes having a center
substantially coinciding with that of said elastic member on a plane
extending perpendicular to a length of the gas sensor.
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2. A gas sensor as set forth in claim 1, wherein the second end
of said cover has a portion crimped to retain said elastic member
within said cover, and wherein said elastic member experiences a
10% to 20% reduction in outer diameter due to crimping of the
20 second end of said cover.
3. A gas sensor as set forth in claim 1, wherein a minimum
distance between adjacent two of the holes on the plane extending
perpendicular to the length of the gas sensor is 1mm or more, and
25 wherein a minimum distance between an outer periphery of said
elastic member and one of the holes closest to the periphery of said

elastic member is 1mm or more.

4. A gas sensor as set forth in claim 1, wherein the holes have formed on an inner wall thereof a rib which projects in a radius
5 direction of the holes to establish elastic abutment to the lead wires and is opposed to a portion of the second end of said cover crimped to retain said elastic member within said cover in the radius direction of the holes.
- 10 5. A gas sensor as set forth in claim 1, wherein said elastic member is made of an insulating material.
6. A gas sensor as set forth in claim 1, wherein the holes other than the one formed in the center of said elastic member are
15 arranged at regular intervals in a circle defined about the center of said elastic member.